



# PPP-16i

## Portable Power Pack

### Installation Instructions

This ice fishing power pack is designed for use with most small and mid-size NMEA 2000® compatible Lowrance® units with blue connectors. For complete details on compatible units, consult your dealer or the company web site, [www.lowrance.com](http://www.lowrance.com).

Even though it was designed for ice fishing, the power pack can also extend the use of your sonar or GPS into warm weather angling. It's ideal for fishing from a dock or pier. Crappie fishermen who tie up to drowned trees will find the PPP-16i useful for that type of stationary fishing as well.

With an optional portable Skimmer® transducer, you can run the unit in your own boat, or take it along as a second sonar or GPS in a friend's boat. The versatile sonars compatible with the PPP-16i have scrolling chart displays as well as flasher displays, making them fully functional for boat trolling and stationary use.

The PPP-16i package includes: freeze resistant power pack carry bag, base plate, rechargeable gel cell battery, battery charger, ice fishing transducer, transducer mounting rod, swing arm and adjustment lock for holding the mounting rod, hook and loop battery straps and the nuts and bolts needed to assemble the power pack. The gimbal bracket is sold separately.

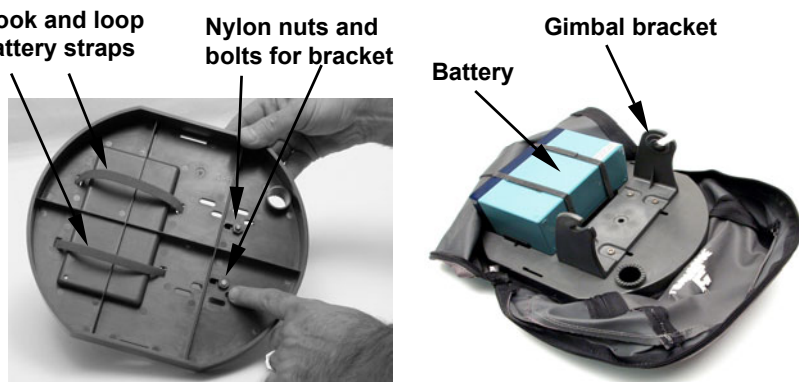
When assembled, the pack is designed to fit comfortably inside a typical 5-gallon plastic bucket. This power pack can also use an optional battery adapter that holds eight "D" size batteries. You can assemble everything without tools, but it's easiest if you have a screwdriver and perhaps a small adjustable wrench or pair of wire pliers.



**PPP-16i Portable Power Pack with transducer and GPS module installed. Shown with the LMS-332C.**

## MOUNTING BRACKET INSTALLATION

1. Attach the gimbal bracket (sold separately) to the base plate with the nylon nuts and bolts supplied with the power pack.



**Secure gimbal bracket to base plate (left) and slide the battery straps through the slots on either side of the tray.**

2. Slide the hook and loop battery straps through the slots on either side of the battery tray as shown in the preceding figure. (The two hook and loop battery straps pack as one piece that you must peel apart.)

## BATTERY CARE

Make sure the battery is fully charged before you use the PPP-16i for the first time. When fully discharged, it takes approximately nine hours to recharge the battery. Under ordinary operating conditions, the battery will run your unit with the backlight on for approximately 24 hours before it needs recharging. Battery capacity will vary depending on air temperature, water depth, backlight settings and the size of the sonar or GPS you are using.

To charge the battery, plug the charger into a 110 VAC electrical outlet, then connect the red lead to the red battery contact and the black lead to the black battery contact. When you first plug in the charger, the indicator light glows green, which shows it is receiving power. After you connect the battery, the light will turn red, indicating the battery is now being charged. When the light turns green again, the battery is fully charged.

You can recharge the battery after every fishing trip, even if the battery was not fully discharged. This will keep the unit ready for your next fishing expedition. Disconnect the battery when stored for long periods of time.

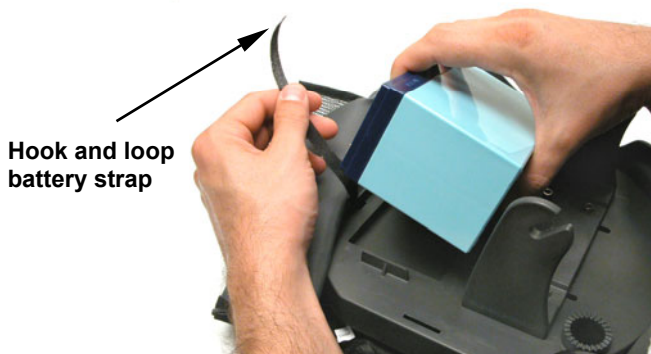


The Battery charger's indicator light glows red when charging. It glows green when the battery is fully charged. To charge the battery, attach the red connector to the red (positive) contact and the black connector to the black (negative) contact.

You should also consider charging the battery once a month while in storage. Most Lowrance units include a display that will show voltage data, allowing you to monitor how much power the battery is putting out. Some of the units have a battery capacity indicator, which monitors how much power the battery has left.

## BATTERY INSTALLATION

1. Position the battery in the battery tray with the contacts pointed toward the rear of the base plate, away from the gimbal bracket.



**Place battery into battery tray.**

2. Secure the battery in the tray with the hook and loop battery straps.

3. Attach the power leads from the 3-branched power cable to the battery contacts or terminals. Connect the red wire to the red/positive terminal and the black wire to the black/negative terminal. The power cable's white wire and the data cable's (labeled RS-232 COMM) 4 wires are unused and should be sealed with electrical tape or a wire nut.



Black wire (-)

Red wire (+)  
with fuse

Battery shown connected to sonar unit's power leads.

### WARNING:

The sonar or GPS unit *must* be fused with the enclosed 3-amp fuse (or equivalent). *If a malfunction happens inside the unit, extensive damage can occur if the enclosed fuse is not used. As with all electrical devices, the unit could be damaged to a point where it is unrepairable and could even cause harm to the user when not properly fused.* Failure to use a 3-amp fuse will void your unit's warranty.

4. Now, plug the cables into their designated sockets on the back of the unit. See the following figure.

### NOTE:

The socket configuration on the back of your unit may differ from the examples in this instruction sheet. Refer to the socket labeling on the back of your unit or the unit's instruction manual for the correct configuration.



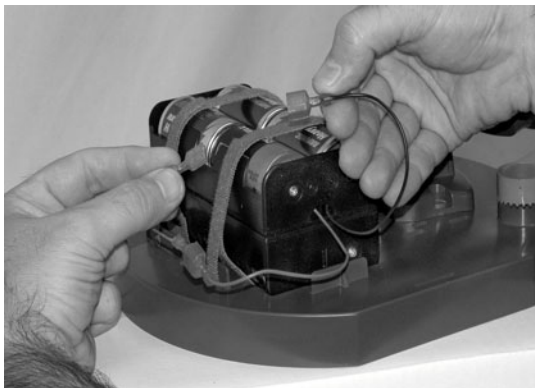
Transducer  
cable.

3-branch  
power/data  
cable.

GPS/Network  
cable.

Plugging the transducer cable into the sonar socket on the back of the unit. The power/data and GPS module cables are already connected.

Each cable has a blue locking collar connector.



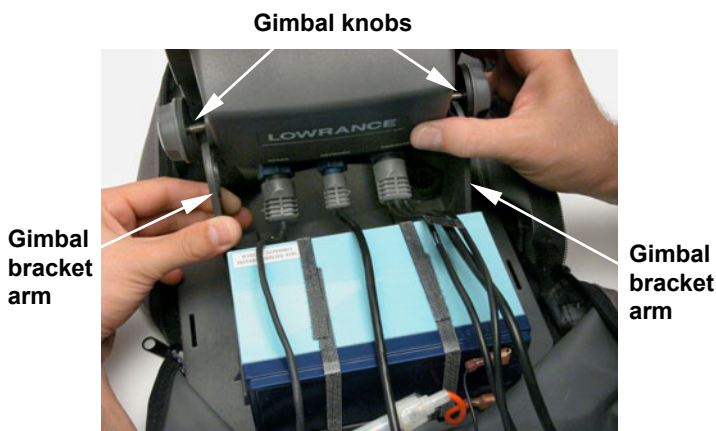
**Optional D cell battery adapter. Connect black to black and red to red.**

**Caution:**

*When using the sonar in a saltwater environment, we strongly recommend you unplug the red and black power connectors from the battery terminals when the unit is not in use. When the unit is turned off, but still connected to a power supply, electrolysis can occur in the power cable plug. This may result in corrosion of the plug body along with the electrical contacts in the cable and the unit's power socket.*

**MOUNTING THE UNIT**

1. Attach the sonar unit to the gimbal bracket with the washers and knobs supplied with the unit. Be sure to slide the rubber washers onto the knobs first.



**When the unit is in the desired position, tighten the gimbal knobs.**

2. To adjust the viewing angle, loosen the gimbal knobs, tilt the unit to the desired position, then retighten the knobs.

3. Turn on the sonar unit. If it doesn't work, make sure the power leads are firmly connected to the battery terminals. Also be sure the lead colors match the battery terminal colors (red positive to positive and black negative to negative).

If it still doesn't work, check the battery voltage. Most complaints about portable units result from batteries that have not been charged. If you are using the optional D dry cell battery adapter, be sure you use fresh batteries. The efficiency of dry cell batteries drops in cold weather. It is a good idea to have the batteries and the sonar unit nice and warm before leaving home. (If you are using disposable D batteries, always remove them from the power pack when storing the unit because dead batteries can leak, corroding the contacts of the battery adapter.)

If the batteries do lose their charge, you can sometimes restore them by warming them up. A better option is to replace them with batteries that have been kept warm.

#### **WARNING:**

**Never heat batteries over an open flame or direct hot air onto them. A fire or explosion could result.**

#### **MOUNTING THE TRANSDUCER**

1. Slip the washer onto the transducer rod, followed by the transducer and the wing nut.



**Assembled transducer, attached to the mounting rod.**

2. The wing nut should be tightened enough to hold the transducer on the rod, but it should be loose enough to allow the transducer to swing freely. This allows the transducer to self-position itself straight down, for ideal ice fishing performance.

3. Grasp the assembled transducer and rod in one hand and thread the swing arm's socket end onto the rod.



**Insert mounting rod through swing arm's socket, as shown.**

4. Snap the red rubber adjustment lock onto the rod and screw it into the swing arm's threaded socket. As the lock is screwed in, it tightens on the mounting rod, holding it in place.



**Snap adjustment lock onto transducer mounting rod as shown, then screw it into the swing arm's socket.**

If it is too hard to turn, consider adding a small amount of petroleum jelly or silicone lubricant to the threads on the adjustment lock. This will help the lock turn more easily, which may be necessary in very cold environments.

5. Slip the assembled transducer rod and swing arm into the ratcheted swing arm socket on the front of the base plate.



**Mount swing arm in ratcheted socket on base plate.**

To adjust transducer depth, loosen the adjustment lock, slide the rod up or down, then retighten. To adjust lateral position in your fishing hole, simply nudge the arm to one side or another, then lightly press down on the arm's ratchet end to engage the ratchets. See the following figure.



**Ratchet end**

**Adjust transducer position by loosening the red adjustment lock (for height), or by rotating the swing arm (side to side). Press lightly on the ratchet end to hold the arm in position and resist lateral movement.**

***Tip:***

When landing a fish, push the arm to one side or just grab the swing arm, lift it out of your fishing hole and lay it to one side.

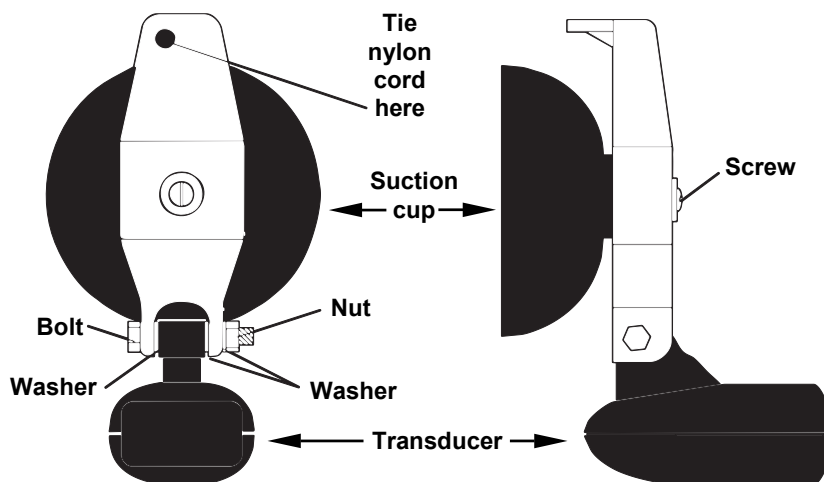
**OPTIONAL PORTABLE TRANSDUCER ASSEMBLY**

Assemble the Skimmer transducer and portable-mounting bracket as shown in the following illustrations. (Skimmers are available with built-in temperature sensors, which allow your unit to display water temperature.)



Make sure there is one washer on each side of the transducer, inside the bracket. Slide the other washer over the end of the bolt and screw on the nut.

Screw the suction cup onto the bracket using the supplied screw and flat washer. Tie the nylon cord through the hole in the top of the bracket. When using the transducer, tie the other end of the nylon cord to the boat. This will help prevent losing the transducer if it comes off.



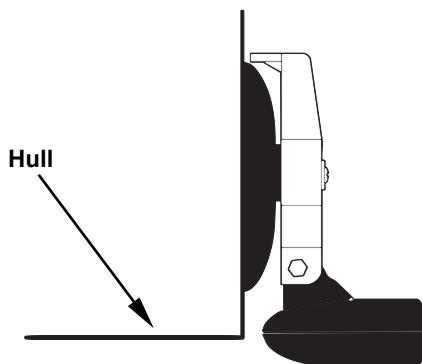
**Portable transducer assembly: rear view (left) and side view (right).**

Clean the chosen area of the hull before attaching the suction cup. Locate the transducer on the hull as shown in the following figure. Don't let the bracket extend below the hull, because at high speeds, the water pressure against it can cause the suction cup to come off.

**NOTE:**

For optimum operation, the portable transducer should be adjusted so it is parallel to the ground. For more information on this, see the segment in the head unit's operation manual on Transducer Orientation and Fish Arches.

Moisten the suction cup, then press it onto the hull as firmly as possible. Tie the nylon cord to the boat and set the power pack and sonar unit in a location for easy viewing. Your portable sonar is now ready for use.



**Portable transducer installed on boat transom.**

### **STOWING FOR TRANSPORT**

There is room inside the power pack bag for all its components as well as a portable transducer.

Fold the ice transducer against the rod, so it will fit inside the bag. Zip up the openings and your equipment is ready for transport.



**PPP-16i ready for travel.**

## **LOWRANCE ELECTRONICS FULL ONE-YEAR WARRANTY**

"We," "our," or "us" refers to LOWRANCE ELECTRONICS, INC., the manufacturer of this product. "You" or "your" refers to the first person who purchases this product as a consumer item for personal, family or household use.

We warrant this product against defects or malfunctions in materials and workmanship, and against failure to conform to this product's written specifications, all for one (1) year from the date of original purchase by you. WE MAKE NO OTHER EXPRESS WARRANTY OR REPRESENTATION OF ANY KIND WHATSOEVER CONCERNING THIS PRODUCT. Your remedies under this warranty will be available so long as you can show in a reasonable manner that any defect or malfunction in materials or workmanship, or any non-conformity with the product's written specifications, occurred within one year from the date of your original purchase, which must be substantiated by a dated sales receipt or sales slip. Any such defect, malfunction, or non-conformity which occurs within one year from your original purchase date will either be repaired without charge or be replaced with a new product identical or reasonably equivalent to this product, at our option, within a reasonable time after our receipt of the product. If such defect, malfunction, or non-conformity remains after a reasonable number of attempts to repair by us, you may elect to obtain without charge a replacement of the product or a refund for the product. THIS REPAIR, OR REPLACEMENT OR REFUND (AS JUST DESCRIBED) IS THE EXCLUSIVE REMEDY AVAILABLE TO YOU AGAINST US FOR ANY DEFECT, MALFUNCTION, OR NON-CONFORMITY CONCERNING THE PRODUCT OR FOR ANY LOSS OR DAMAGE RESULTING FROM ANY OTHER CAUSE WHATSOEVER. WE WILL NOT UNDER ANY CIRCUMSTANCES BE LIABLE TO ANYONE FOR ANY SPECIAL, CONSEQUENTIAL, INCIDENTAL, OR OTHER INDIRECT DAMAGE OF ANY KIND.

Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you.

This warranty does NOT apply in the following circumstances: (1) when the product has been serviced or repaired by anyone other than us; (2) when the product has been connected, installed, combined, altered, adjusted, or handled in a manner other than according to the instructions furnished with the product; (3) when any serial number has been effaced, altered, or removed; or (4) when any defect, problem, loss, or damage has resulted from any accident, misuse, negligence, or carelessness, or from any failure to provide reasonable and necessary maintenance in accordance with the instructions of the owner's manual for the product.

We reserve the right to make changes or improvements in our products from time to time without incurring the obligation to install such improvements or changes on equipment or items previously manufactured.

This warranty gives you specific legal rights and you may also have other rights which may vary from state to state.

REMINDER: You must retain the sales slip or sales receipt proving the date of your original purchase in case warranty service is ever required.

**LOWRANCE ELECTRONICS  
12000 E. SKELLY DRIVE, TULSA, OK 74128  
(800) 324-1356**

## How to Obtain Service...

### ...in the USA:

Contact the Factory Customer Service Department. Call toll-free:

**For Lowrance: 800-324-1356. For Eagle: 800-324-1354**

8 a.m. to 5 p.m. Central Standard Time, M-F

*Lowrance Electronics and Eagle Electronics may find it necessary to change or end their shipping policies, regulations and special offers at any time. They reserve the right to do so without notice.*

### ...in Canada:

Contact the Factory Customer Service Department. Call toll-free:

**800-661-3983**

**905-629-1614 (not toll-free)**

8 a.m. to 5 p.m. Eastern Standard Time, M-F

### ...outside Canada and the USA:

Contact the dealer in the country where you purchased your unit. To locate a dealer near you, see the instructions in paragraph number 1 below.

## Accessory Ordering Information

LEI Extras™, Inc. is the accessory source for sonar and GPS products manufactured by Lowrance Electronics and Eagle Electronics. To order Lowrance or Eagle accessories, please contact:

1) Your local marine dealer or consumer electronics store. To locate a Lowrance dealer, visit the web site, [www.lowrance.com](http://www.lowrance.com), and look for the Dealer Locator. To locate an Eagle dealer, visit the web site, [www.eaglesonar.com](http://www.eaglesonar.com), and look for the Dealer Locator. Or, consult your telephone directory for listings.

2) U.S. customers: LEI Extras Inc., PO Box 129, Catoosa, OK 74015-0129  
**Call toll free in the U.S., 800-324-0045**, 8 a.m. to 5 p.m. Central Standard Time, M-F, or visit our web site [www.lei-extras.com](http://www.lei-extras.com).

3) Canadian customers: Lowrance/Eagle Canada, 919 Matheson Blvd. E. Mississauga, Ontario L4W2R7 or fax 905-629-3118.

Call toll free in Canada, 800-661-3983, or dial 905 629-1614 (not toll free), 8 a.m. to 5 p.m. Eastern Standard Time, M-F.



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